

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of MARTHA J. HUBER in support of her Application for Construction Permit for a new FM Broadcast Station to operate on Channel 234A in New Albany, Indiana.

The proposed site is shown in Exhibit B. It is 129.08 kilometers from adjacent-channel Class C1 WLAP-FM, Lexington, Kentucky, whereas §73.207 requires a spacing for 133 kilometers. However, this allotment was proposed prior to October 2, 1989, and therefore falls under §73.213(c) of the Rules, which permits operation with maximum power of 3 kw and a spacing to adjacent-channel Class C1 stations of 129 kilometers. Thus, the proposed site meets all pertinent spacing requirements.

A vertical sketch of the proposed antenna and supporting structure is included as Exhibit C. Exhibit D is a tabulation of proposed operating parameters, and Exhibit E provides elevation and contour data. The predicted service contours are plotted in Exhibit F. Exhibit G shows the proposed site in relation to established airways and landing areas, and Exhibit H is a copy of FAA Form 7460-1, which has been submitted to that agency.

Under traditional standards a grant of this application would constitute a minor environmental action. However, since the Commission now considers the possible biological effects of RF transmissions in this regard, we have studied the matter. Employing the methods set forth in *OST*

EXHIBIT A

Bulletin No. 65 and considering the vertical pattern of a typical two-bay antenna, we calculate the maximum ground-level power density from the proposed facility to be 0.078 mw/cm^2 at locations approximately 14 meters from the tower base. Since this is but 7.8 percent of the 1.0 mw/cm^2 reference for this frequency, and since the applicant will take the necessary steps (e.g., power reduction) to avoid excessive RF exposure when personnel must climb the tower, a grant of this proposal would clearly qualify as a minor environmental action.

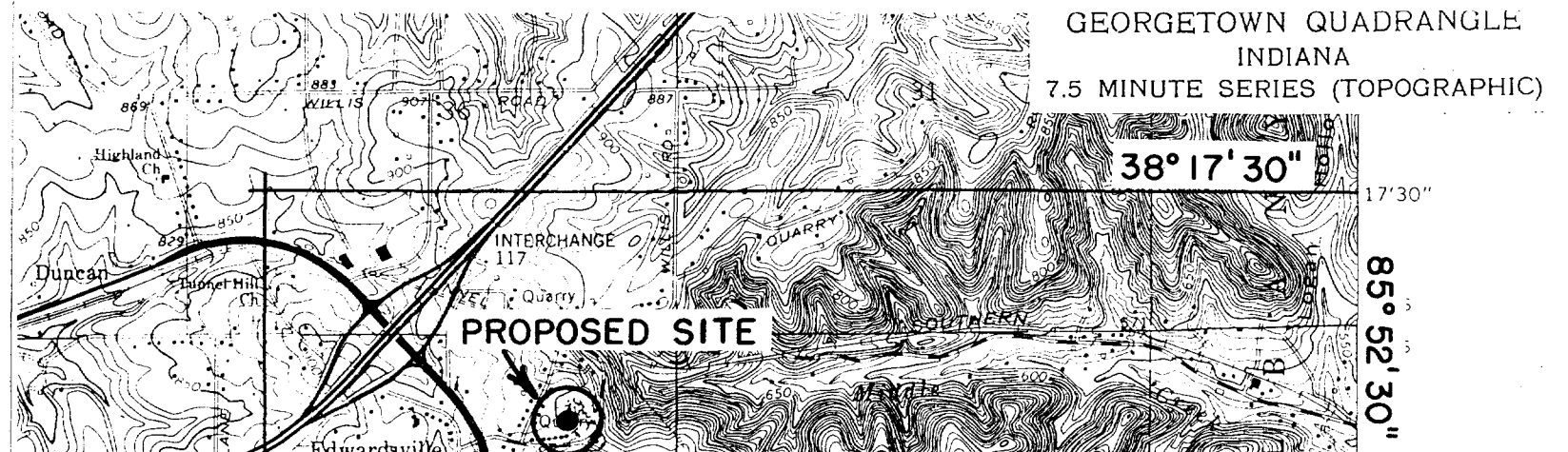
I declare under penalty of perjury that the foregoing statements and the attached Engineering Report, which was prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.



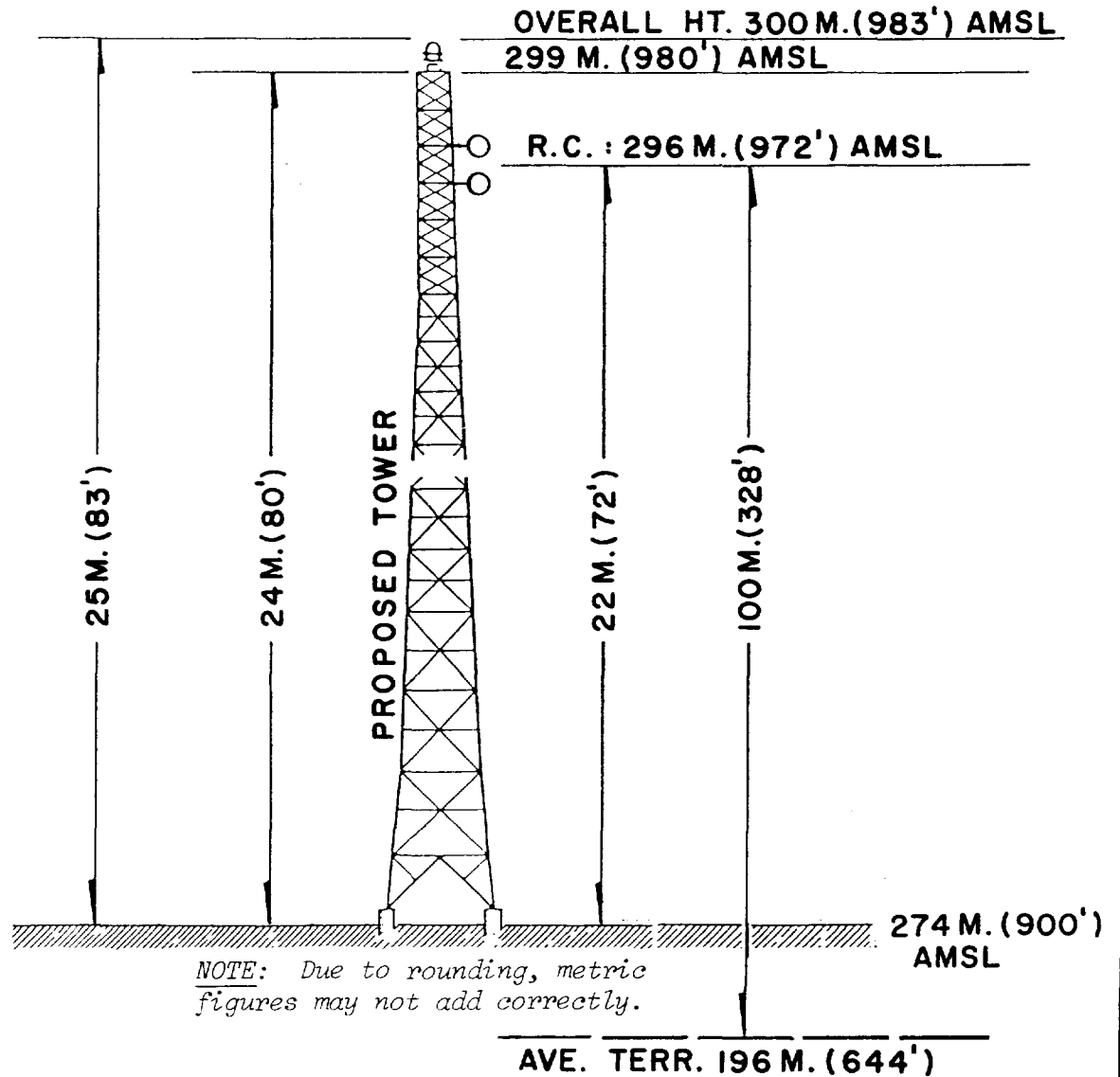
NEIL M. SMITH

November 7, 1991

GEORGETOWN QUADRANGLE
INDIANA
7.5 MINUTE SERIES (TOPOGRAPHIC)



NOT TO SCALE



SITE COORDINATES :

38° 17' 05"

85° 54' 19"

EXHIBIT C

ELEVATION OF ANTENNA STRUCTURE

MARTHA J. HUBER

PROPOSED FM BROADCAST STATION
CHANNEL 234A - NEW ALBANY, INDIANA

EXHIBIT D

PROPOSED OPERATING PARAMETERS

MARTHA J. HUBER

PROPOSED FM BROADCAST STATION
CHANNEL 234A - NEW ALBANY, INDIANA

Transmitter power output	3.1 kw
Transmission line loss	0.1 kw
Input to antenna	3.0 kw
Antenna gain (horizontal and vertical)	0.9971
Effective radiated power (H and V)	3.0 kw

Transmitter make and model: Type-accepted

Transmission line

Make and model:	Andrew HJ7-50A
Size:	1-5/8"
Type:	Air Helix
Length:	75 feet
Attenuation:	0.1987 db per 100 feet
Efficiency:	96.6 percent

Antenna

Make and model:	ERI FML-2E
Type:	Circularly polarized
Number of bays:	2

Applicant proposes to install auxiliary power at the transmitter site.

EXHIBIT E

ELEVATION AND CONTOUR DATA

MARTHA J. HUBER

PROPOSED FM BROADCAST STATION
CHANNEL 234A - NEW ALBANY, INDIANA

Azimuth ° T	Avg. Elev. AMSL		Effective		Distance to Predicted Contour			
	2 to 10 Miles		Antenna Height		3.16 mv/m (70 db μ)		1.0 mv/m (60 db μ)	
	meters	feet	meters	feet	km.	miles	km.	miles
0	250	820	46	152	9	5.7	16	10.1
45	191	628	105	344	14	8.7	25	15.5
90	132	432	165	540	18	10.9	30	18.9
135	137	450	159	522	17	10.7	30	18.6
180	155	508	141	464	16	10.1	28	17.6
225	242	795	54	177	9	5.8	17	10.8
270	229	752	67	220	11	6.8	19	12.0
315	235	770	62	202	10	6.5	19	11.5
72*	145	475	151	497	17	10.4	29	18.2

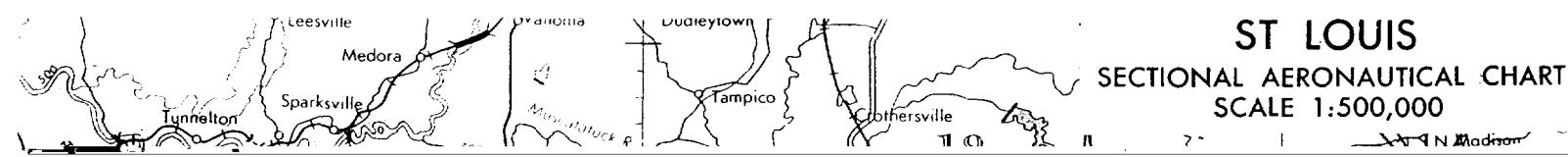
* Radial through New Albany; not included in average

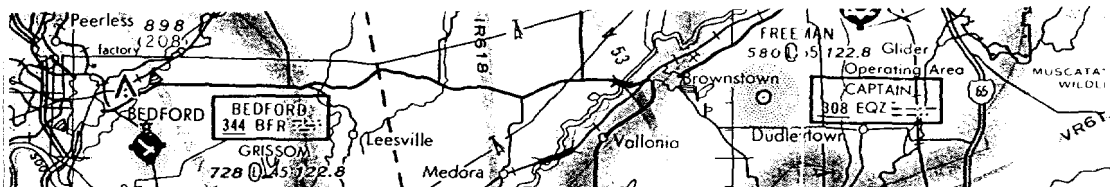
NOTE: Due to rounding, metric figures may not add correctly.

Height of radiation center above mean sea level	972 feet, 296 meters
Height of average terrain above mean sea level	644 feet, 196 meters
Height of radiation center above average terrain	328 feet, 100 meters
Effective radiated power (horizontal and vertical)	3.0 kw

Geographic Coordinates

North latitude: 38° 17' 05"
 West longitude: 85° 54' 19"





ST LOUIS

SECTIONAL AERONAUTICAL CHART

SCALE 1:500,000



DO NOT REMOVE CARBONS

Form Approved OMB No. 2120-0001

NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION			Aeronautical Study Number									
1. Nature of Proposal A. Type <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Alteration B. Class <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Temporary (Duration _____ months) C. Work Schedule Dates Beginning <u>upon FCC grant</u> End <u>6 mos. later</u>			2. Complete Description of Structure A. Include effective radiated power and assigned frequency of all existing, proposed or modified AM, FM, or TV broadcast stations utilizing this structure. B. Include size and configuration of power transmission lines and their supporting towers in the vicinity of FAA facilities and public airports. C. Include information showing site orientation, dimensions, and construction materials of the proposed structure. 2-bay FM transmitting antenna mounted on a self-supporting steel tower Channel 234A (94.7 MHz) ERP: 3 kw (H and V) <i>(if more space is required, continue on a separate sheet.)</i>									
3A. Name and address of individual, company, corporation, etc. proposing the construction or alteration. (Number, Street, City, State and Zip Code) (812) <u>948-2015</u> area code Telephone Number <div style="border: 1px solid black; padding: 10px; text-align: center;"> MARTHA J. HUBER 1927 Plum Hill Way Floyds Knobs, Indiana 47119 </div>												
B. Name, address and telephone number of proponent's representative if different than 3 above. (202) 293-7742 Neil M. Smith SMITH and POWSTENKO Suite 600; 2033 M Street, N.W. Washington, D. C. 20036												
4. Location of Structure <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"> A. Coordinates (To nearest second) 38° 17' 05" Latitude 85° 54' 19" Longitude </td> <td style="width: 20%;"> B. Nearest City or Town, and State Edwardsville, Indiana (1) Distance to 4B 0.2 Miles (2) Direction to 4B 260° T </td> <td style="width: 20%;"> C. Name of nearest airport, heliport, flightpark, or seaplane base New Albany Hospital (HP) (1) Distance from structure to nearest point of nearest runway 4.1 miles (2) Direction from structure to airport 73° T </td> </tr> </table>			A. Coordinates (To nearest second) 38° 17' 05" Latitude 85° 54' 19" Longitude	B. Nearest City or Town, and State Edwardsville, Indiana (1) Distance to 4B 0.2 Miles (2) Direction to 4B 260° T	C. Name of nearest airport, heliport, flightpark, or seaplane base New Albany Hospital (HP) (1) Distance from structure to nearest point of nearest runway 4.1 miles (2) Direction from structure to airport 73° T	5. Height and Elevation (Complete to the nearest foot) <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;"> A. Elevation of site above mean sea level </td> <td style="width: 20%; text-align: center;">900</td> </tr> <tr> <td> B. Height of Structure including all appurtenances and lighting (if any) above ground, or water if so situated </td> <td style="text-align: center;">83</td> </tr> <tr> <td> C. Overall height above mean sea level (A + B) </td> <td style="text-align: center;">983</td> </tr> </table>	A. Elevation of site above mean sea level	900	B. Height of Structure including all appurtenances and lighting (if any) above ground, or water if so situated	83	C. Overall height above mean sea level (A + B)	983
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A. Elevation of site above mean sea level	900											
B. Height of Structure including all appurtenances and lighting (if any) above ground, or water if so situated	83											
C. Overall height above mean sea level (A + B)	983											
D. Description of location of site with respect to highways, streets, airports, prominent terrain features, existing structures, etc. Attach a U.S. Geological Survey quadrangle map or equivalent showing the relationship of construction site to nearest airport(s) <i>(if more space is required, continue on a separate sheet of paper and attach to this notice.)</i> <div style="text-align: center; padding: 10px;"> 4704 Corydon Pike, Georgetown Township, Floyd County, Indiana </div>												
<small>Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1101). Persons who knowingly and willingly violate the Notice requirements of Part 77 are subject to a fine (criminal penalty) of not more than \$500 for the first offense and not more than \$2,000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1472(a)).</small>												
I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards if necessary.												
Date 11-07-91	Typed Name/Title of Person Filing Notice NEIL M. SMITH, Broadcasting Consultant	Signature 										

Section V-B - FM BROADCAST ENGINEERING DATA

FOR COMMISSION USE ONLY

File No. _____

ASB Referral Date _____

Referred by _____

Name of Applicant

MARTHA J. HUBER

Call letters (if issued)

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Is this application being filed in response to a window? ☒ Yes ☐ No

If Yes, specify closing date: November 15, 1991

Purpose of Application: (check appropriate box(es))

☒ Construct a new (main) facility

☐ Construct a new auxiliary facility

☐ Modify existing construction permit for main facility

☐ Modify existing construction permit for auxiliary facility

☐ Modify licensed main facility

☐ Modify licensed auxiliary facility

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

☐ Antenna supporting-structure height

☐ Effective radiated power

☐ Antenna height above average terrain

☐ Frequency

☐ Antenna location

☐ Class

☐ Main Studio location

☐ Other (Summarize briefly)

File Number(s) --

1. Allocation:

Channel No.	Principal community to be served:		
	City	County	State
234	New Albany	Floyd	Indiana

Class (check only one box below)

☒ A ☐ B1 ☐ B ☐ C3

☐ C2 ☐ C1 ☐ C

2. Exact location of antenna.

(a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark.

4704 Corydon Pike, Georgetown Township, Floyd County, Indiana

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.

Latitude	38°	17'	05"	Longitude	85°	54'	19"
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3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? ☐ Yes ☒ No

If Yes, give call letter(s) or file number(s) or both.

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If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any.

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4. Does the application propose to correct previous site coordinates?

☐ Yes ☒ No

If Yes, list old coordinates.

Latitude	0	'	"	Longitude	0	'	"
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5. Has the FAA been notified of the proposed construction?

☒ Yes ☐ No

If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available.

Exhibit No.
HDate November, 1991 Office where filed Great Lakes Regional Office

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

	Landing Area	Distance (km)	Bearing (degrees True)
(a)	<u>Hospital (HP)</u>	<u>6.6</u>	<u>73</u>
(b)	<u>County Line</u>	<u>7.2</u>	<u>260</u>

7. (a) Elevation: (to the nearest meter)

(1) of site above mean sea level; 900'/274 meters(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and 83'/25 meters(3) of the top of supporting structure above mean sea level [(aX1) + (aX2)] 983'/300 meters

(b) Height of radiation center: (to the nearest meter) H - Horizontal; V - Vertical

(1) above ground 72'/22 meters (H)72'/22 meters (V)(2) above mean sea level [(aX1) + (bX1)] 972'/296 meters (H)972'/296 meters (V)(3) above average terrain 328'/100 meters (H)328'/100 meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required

Exhibit No.

10. Is a directional antenna proposed?

☐ Yes ☒ No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of the relative field.

Exhibit No.
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11. Will the proposed facility satisfy the requirements of 47 C.F.R. Sections 73.315(a) and (b)?

☒ Yes ☐ No

If No, attach as an Exhibit a request for waiver and justification therefor, including amounts and percentages of population and area that will not receive 3.16 mV/m service.

Exhibit No.
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12. Will the main studio be within the protected 3.16 mV/m field strength contour of this proposal?

☒ Yes ☐ No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125.

Exhibit No.
--

13. (a) Does the proposed facility satisfy the requirements of 47 C.F.R. Section 73.207? *See Exhibit A* ☐ Yes ☒ No

(b) If the answer to (a) is No, does 47 C.F.R. Section 73.213 apply?

☒ Yes ☐ No

(c) If the answer to (b) is Yes, attach as an Exhibit a justification, including a summary of previous waivers.

Exhibit No.
A

(d) If the answer to (a) is No and the answer to (b) is No, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose.

Exhibit No.
--

(e) If authorization pursuant to 47 C.F.R. Section 73.215 is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following:

Exhibit No.
--

- (1) Protected and interfering contours, in all directions (360°), for the proposed operation.
- (2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as the transmitter location.
- (3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur.
- (4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
- (5) The official title(s) of the map(s) used in the exhibit(s).

14. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast *except citizens band or amateur* radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference?

☐ Yes ☒ No

If Yes, attach as an Exhibit a description of any expected, undesired effects of operation of the

Exhibit No.

15. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V. The map must further clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No. B

16. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No. F

(a) the proposed transmitter location, and the radials along which profile graphs have been prepared;

(b) the 318 mV/m and 1 mV/m predicted contours; and

(c) the legal boundaries of the principal community to be served.

17. Specify area in square kilometers (1 sq. mi. = 2.59 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 1803 sq. km. Population 774,536
(696 square miles)

18. For an application involving an auxiliary facility only, attach as an Exhibit a map *(Sectional Aeronautical Chart or equivalent)* that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No. --

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license.

19. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.313)*

Source of terrain data: *(check only one box below)*

☒ Linearly interpolated 30-second database ☐ 7.5 minute topographic map

(Source: NGDC)

☐ Other *(briefly summarize)*

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances	
		To the 3.16 mV/m contour (kilometers)	To the 1 mV/m contour (kilometers)
-			
0			
45			
90			
135		See Exhibit E of Engineering Report	

ORIGINAL

LAW OFFICES

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TELECOPIER
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November 14, 1991

VIA COURIER

Federal Communications Commission
Mass Media Services